BRUHAT BANGALORE MAHANAGARA PALIKE
YELAHANKA ZONE

Estimate Cost Rs. **949286.00**

Name of Work: Modified Estimate for Maintainance of Drilled BBMP Borewells in ward no 10, (Doddabommasandra), Vidyaranyapura Sub Division.

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	A) Rewinding								
1	Lifting of Submersible pump set as per Specification and direction **(P. 56 / I. 10.3.21) PRED SR (2012-13)**	Each	Not Executed						
2	Transportation of pumping machineries (**P. 56 / I. 10.3.19) PRED SR (2012-13)**	Each	Not Executed						
3	Labour charges (over hauling) **P. No. 56 / I No.10.3.22 PRED SR (2012-13)**	Job	Not Executed						
4	**A) Repairs to Motor:** Rewinding of submersible pump sets with copper insulation wire of suitable gauge as per ISI specification with guarantee of 6 months. **PRED SR (2012-13) P No. 54 / I. No. 10.1) (Above 10 HP upto 20 HP add Rs.150/- for every ½ HP)**								
	B) 12.5 HP Motor		Not Executed						
	B) Replacement of Motor Parts:								
5	Starter (with one year Guarantee) **P No. 55 / I No. 10.3.3 PRED SR (2012-13)**	No.	Not Executed						
6	Rotor (with one year Guarantee) **P No. 55 / I No. 10.3.6) PRED SR (2012-13)**	No.	Not Executed						
7	Upper Flange **P. No. 56 / I No. 10.3.7 PRED SR (2012-13)**	No.	Not Executed						
8	Lower Housing **P. No. 56 / I No. 10.3.10 PRED SR (2012-13)**	No.	Not Executed						
9	Carbon Housing **P. No. 56 / I No.10.3.12 PRED SR (2012-13)**	No.	Not Executed						
10	Thrust bearing block assembly complete with Segment bearing pad.**P. No. 55 / I No.10.3.13 PRED SR (2012-13)**	No.	Not Executed						
	C) Replacement of pump parts: The following main components of submersible pump sets requiring replacement.		Not Executed						
11	Oil Seal **P. No. 54 / I No.10.2.3 PRED SR (2012-13)**	No.	Not Executed						
12	Oil Seal Steel Bush **P. No. 54 / I No. 10.2.4 PRED SR (2012-13)**	No.	Not Executed						
13	Guide vane **P. No. 54 / I No. 10.2.5 PRED SR (2012-13)**	No.	Not Executed						
14	Impeller Shell moulded with aluminium Bronze) **P. No. 54 / I No. 10.2.6 PRED SR (2012-13)**	No.	Not Executed						
15	Discharge outlet (D.O) Bearing D.O Steel Bush **P. No. 55 / I No. 10.2.7 PRED SR (2012-13)**	No.	Not Executed						
16	Steel Bush **P. No.55 / I No. 10.2.9 PRED SR (2012-13)**	No.	Not Executed						
17	Pump shaft made out of stainless steel Centreless ground with key way (upto 8 stages) **P. No. 55 / I No. 10.2.11 PRED SR (2012-13)**	No.	Not Executed						
18	Non – return valve (NRV) assembly complete with rubber 'O' Ring **P. No. 55 / I No. 10.2.14 PRED SR (2012-13)**	No.	Not Executed						
19	Cable Guard **P. No. 55 / I No. 10.2.15 PRED SR (2012-13)**	No.	Not Executed						
20	Brass Filter **P. No. 55 / I No. 10.2.17 PRED SR (2012-13)**	No.	Not Executed						

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
21	Re-erection charges of pumping machineries including overhauling and pointing **P. No. 56 / I No. .3.20 PRED SR (2012-13)**	Each	Not Executed						
	D) General Items								
22	Supplying of ISI marked galvanized mild steel tube (continously welded electric resistance welded (ERW) high frequency, induction welded (HFIW) Hot finished welded type of nominal bore given below screwed at both ends as per IS 554/1986 with latest amendments, pipes threaftes at one end and the other end protected asper specification in random lengths of 4 to 7 mtrs Confirming to IS 1239 part I/1990 with amendament 1-5 and with all its latest amendements if any. The pipes supplied should be with BIS mark No 3/08-09 2406/15.10.2008	Rmtr							
			Not Executed						
23	Heavy Duty Collar 50 mm dia	Nos	Not Executed						
24	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 & confirming to GTP of **GROUP-A. P. No. 12 / I No. 2.10.4(1) 3C x 6 Sqm mm KPWD Electrical SR 2014-15**	Mtr							
			Not Executed						
25	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A **P No. 55/ I No. 7.4.4 4 core 16 Sqmm KPWD Electrical SR 2014-15**	Mtr							
			Not Executed						
26	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct. **P No. 61 / I No. 7.8.1 6Sqmm to 16 Sqmm) KPWD Electrical SR 2014-15**	Mtr							
			Not Executed						
27	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) **P No. 61 / I. No. 7.9.3 KPWD Electrical SR 2014-15**	Mtr							
	For Cutting Road Surface		Not Executed						
28	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV **P. No. 62 / I No. 7.12.1 KPWD Electrical SR 2014-15**	Mtr							
	40mm dia GI pipe		Not Executed						

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
29	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc., **P. No. 62 / I.No. 7.13.2 KPWD Electrical SR 2014-15**	No.							
	16Sqmm		Not Executed						
30	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.**P No. 44 / I No. 6.7.2 KPWD Electrical SR 2014-15**	No.							
	32 Amps		Not Executed						
31	KSRB 13-7.1-4: Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 **Page No. 90 Item No. 13.55 / PWD SR 2015-16**	Nos							
			Not Executed						
32	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete. **P. No. 92 / I. No. 13.81.3 PWD SR 2015-16**	No							
	50mm dia		Not Executed						
33	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete **P.No. 49, I. No. 6.40.2 KPWD Electrical SR 2014-15**	Sq.Cm							
	16SWG		Not Executed						
	EIRL								
1	KSRB 2-2.1 : Earth work excavation for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, **in ordinary soil** not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No, KBS 2.1(a) / 2.3.5, **Page No. 5 / Item No. 2.3 / PWD SR 2015-16**	Cum							
			15	3.00	1.90	1.50	128.25		
							128.25	182.86	**23452.00**
	PWD SR 2015-16 Basic Rate	178.00							
	Area Weightage @8%	14.24							
	Sub Total	**192.24**							
	Tender Premium @-4.88%	**-9.38**							
	Total	**182.86**							
	Above 1.5 Mtrs Depth Add 25% Extra		15	3.00	1.90	0.60	**51.30**	228.57	**11726.00**
	PWD SR 2015-16 Basic Rate	222.50							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Area Weightage @8%	17.80							
	Sub Total	**240.30**							
	Tender Premium @-4.88%	**-11.73**							
	Total	**228.57**							
2	KSRB 4-1.3 : Providing and laying in position plain cement concrete of **mix 1:4:8 with OPC cement @ 180 kgs with 40mm** and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. **No. 12/ Item No. 4.3/ PWD SR 2015-16**	Cum							
			15x2	3.00	0.60	0.15	8.10		
			15x2	1.90	0.60	0.15	5.13		
							13.23	4823.15	**63810.00**
	PWD SR 2015-16 Basic Rate	4695.00							
	Area Weightage @8%	375.60							
	Sub Total	**5070.60**							
	Tender Premium @-4.88%	**-247.45**							
	Total	**4823.15**							
3	KSRB 5.2.3 : Providing and constructing granite / trap / basalt size stone masonry in **foundation with cement mortar 1:6**, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 **Page No. 23 / Item No. 5.6 / PWD SR 2015-16**	Cum							
	Culvert		15x2	3.00	0.60	1.00	54.00		
			15x2	1.90	0.60	1.00	34.20		
			15x2	3.00	0.45	0.75	30.38		
			15x2	1.90	0.45	0.75	19.24		
							137.81	3933.52	**542088.00**
	PWD SR 2015-16 Basic Rate	3829.00							
	Area Weightage @8%	306.32							
	Sub Total	**4135.32**							
	Tender Premium @-4.88%	**-201.80**							
	Total	**3933.52**							
4	KSRB 15.1.2: Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:4, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. **Page No. 109 / Item No. 15.2 / PWD SR 2015-16**	Sqm							
			15x2	2.00		1.00	60.00		
			15x2	1.90		1.00	57.00		
							117.00	91.43	**10697.00**
	PWD SR 2015-16 Basic Rate	89.00							
	Area Weightage @8%	7.12							
	Sub Total	**96.12**							
	Tender Premium @-4.88%	**-4.69**							
	Total	**91.43**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
5	KSRB 4-1.6 : Providing and laying in position plain cement concrete of **mix 1:2:4 with cement @ 240 kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. **No. 12/ Item No. 4.6 / PWD SR 2015-16**	Cum							
	Culvert Coping		15x2	3.00	0.45	0.10	4.05		
			15x2	1.90	0.45	0.10	2.57		
							6.62	5222.77	**34549.00**
	PWD SR 2015-16 Basic Rate	5084.00							
	Area Weightage @8%	406.72							
	Sub Total	**5490.72**							
	Tender Premium @-4.88%	**-267.95**							
	Total	**5222.77**							
6	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **vertical surface such as walls** at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 **Page No. 15 / Item No. 4.31 / PWD SR 2015-16**	Sqm							
	Covering Slab Sides		15x5	5.00		0.25	93.75		
							93.75	291.75	**27352.00**
	PWD SR 2015-16 Basic Rate	284.00							
	Area Weightage @8%	22.72							
	Sub Total	**306.72**							
	Tender Premium @-4.88%	**-14.97**							
	Total	**291.75**							
7	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal**, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999 reaffirmed-2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, walls (any thickness) including attached plasters, column, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1,4.6, **Page No. 13 / Item No. 4.11 / PWD SR 2015-16**	Cum							
	Deck Slab		15x5	0.60	1.90	0.25	21.38		
							21.38	5895.65	**126020.00**
	PWD SR 2015-16 Basic Rate	5739.00							
	Area Weightage @8%	459.12							
	Sub Total	**6198.12**							
	Tender Premium @-4.88%	**-302.47**							
	Total	**5895.65**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
8	KSRB 4.9.2: Providing T.M.T steel reinforcement R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **TMT Bars FE 500 Page No. 17 / Item No. 4.46.2 / PWD SR 2015-16**	Tonne							
			0.076	21.38			**1.62**	59818.67	**97175.00**
	PWD SR 2015-16 Basic Rate	58229.24							
	Area Weightage @8%	4658.34							
	Sub Total	**62887.58**							
	Tender Premium @-4.88%	**-3068.91**							
	Total	**59818.67**							
15	Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km (Page No.123)	Cum							
			Vide Item No. 1				**179.55**	69.16	**12417.00**
	Basic rate for haulage of materials as per item no.17.4 page 141) Rs. 2.00								
	Average weight of earth 1.28 tonne / kg for 2X1.28X2.00=5.12	5.12							
	Add loading and unloading Vide item no.17.1 P.no.141	62.20							
	PWD SR 2015-16 Basic Rate	**67.32**							
	Area Weightage @8%	5.39							
	Sub Total	**72.71**							
	Tender Premium @-4.88%	**-3.55**							
	Total	**69.16**							
								Total	**949286.00**
(Rupees Ten Lakhs Only)									

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.

2 This estimate is prepared as per C.S.R. of PWD 2015-16, PWD Elecrical 2015-15, PRED 2012-13 & SE-RDED approved Rate.

3 The provisions were made in this estimate are necessary and adequate.

4 This works come under B.B.M.P. limits.

Assistant Engineer

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division
Bangalore-97.

Executive Engineer 23/7/16
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division
Bangalore - 92